

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Inventors: Yutaka MURAKAMI, et al.

Application No.: New PCT National Stage Application

Filed: May 24, 2006

For: RECEIVING APPARATUS AND TRANSMITTING  
APPARATUS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents  
Washington, DC 20231

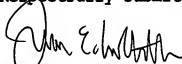
Dear Sir:

Pursuant to Rules 56 and 99, Applicants hereby call the attention of the Patent Office to the art listed on the attached Form PTO 1449. Copies of the art cited in the International Search Report (ISR), which issued by the JPO, are made available to the U.S. examiner in the national stage application, pursuant to MPEP 1893.03(g), and therefore copies of such art are not submitted herewith. The art cited in the ISR is listed on the attached PTO-1449 for an indication of consideration by the examiner. Copies of any other references listed on the PTO-1449, besides those cited in the ISR, are submitted herewith. The B. BJERKE, et al. document is discussed in the present application at page 3, line 1 and the K. KOBAYASHI, et al. document is discussed at page 44, line 11, et seq. The following are English equivalents to foreign patent documents; US535/JP907, US879/JP665, WO455/JP537 and US435/JP046.

APPROPRIATE 24 MAY 2006

Applicants present this art so that the Patent Office may, in the first instance, determine any relevancy thereof to the presently claimed invention, see Beckman Instruments, Inc. v. Chemtronics, Inc., 439 F.2d 1369, 1380, 165 USPQ 355, 364 (5th Cir. 1970). Also see Patent Office Rules 104 and 106. Applicants respectfully request that this art be expressly considered during the prosecution of this application and made of record herein and appear among the "References Cited" on any patent to issue herefrom.

Respectfully submitted,



James E. Ledbetter  
Registration No. 28,732

Date: May 24, 2006

JEL/spp

ATTORNEY DOCKET NO. L9289.06157

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FORM PTO-1449 U.S. Department of Commerce  
(Rev. 4/92) Patent and Trademark Office

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use several sheets if necessary)

ATTY. DOCKET NO.

L9289.06157

SERIAL NO.

10/580398  
New PCT Nat'l Stage  
Application

APPLICANT

Yutaka MURAKAMI, et al.

FILING DATE

May 24, 2006

GROUP

Unassigned

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE APPROPRIATE
/T.B./	2002 0 1 9 1 5 3 5	12/2002	Sugiyama et al.			
/T.B./	5 8 9 2 8 7 9	08/1999	Oshima			
/T.B./	6 1 1 5 4 3 5	09/2000	Harada et al.			

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO
2003 1 2 4 3 0 7	04/2003	JP			
5 1 6 4 6 6 5	06/1994	JP			
2003 5 2 5 5 3 7	08/2003	JP			
/T.B./ 2001 3 9 4 5 5 A1	05/2001	WO			
1 0 1 3 6 0 4 6	05/1998	JP			
2001 1 2 7 8 0 9	05/2001	JP			

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

/T.B./	PCT International Search Report dated February 8, 2005.
	T. AOKI, et al.; "MIMO Channel ni okeru ZF to MLD o Heiyo shita Group Detection ni Kansuru Kento," The Institute of Electronics, Information and Communication Engineers Koen Ronbunshu Tsushin Shingai Taikai 1, B-5-16, Sept. 10, 2003, pp. 393.
	Y. ASHINA, et al.; "Kukan Taiu ni Mochiuru MIMO-MLD no Enzanryo Sakugenmo no Ichikento," Dai 25 Kai Joho Riron to Sono Oyo Symposium, Dec. 10, 2002, pp. 503-506.
	X. ZHUANG, et al.; "Coding-Assisted MIMO Joint Detection and Decoding in Turbo-Doded OFDM," Vehicular Technology Conferences, 2002, Proceedings, VTC 2002-Fall, 2002 IEEE 56th, vol. 1, Sept. 2002, pp. 23-27.
/T.B./	K. KOBAYASHI, et al.; "Soft-Decision Decoder Employing Eigenvalue of Channel Matrix in MIMO Systems," The 14th IEEE 2003 International Symposium on Personal Indoor and Mobile Radio Communication Proceedings, Sept. 2003, pp. 1703-1707.
/T.B./	B. A. BJERKE, et al.; "Multiple-Antenna Diversity Techniques for Transmission over Fading Channels," IEEE, WCNC, Sept. 1999, pp. 1038-1042.

EXAMINER: Initial if citation is considered, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO-1449 [6-4])